## **Bay Area Air Quality Management District**

939 Ellis Street San Francisco, CA 94109 (415) 771-6000

## **Proposed**

## **MAJOR FACILITY REVIEW PERMIT**

# Issued To: City of Sunnyvale Water Pollution Control Facility #A0733

**Facility Address:** 1440 Borregas Ave.

Sunnyvale, CA 94089

Mailing Address: P.O. Box 3707 Sunnyvale, CA 94088

Responsible Official Helen Farnham (408) 730-7260 Facility Contact Rosanna Lacarra (408) 730-7260

| Type of Facility:       | Public-Owned Treatmen  | t Works           |  |
|-------------------------|------------------------|-------------------|--|
| <b>Primary SIC:</b>     | 4952                   |                   |  |
| <b>Product:</b>         | Municipal Wastewater T | reatment Facility |  |
| ISSUED BY THE BA        | Y AREA AIR QUALITY MA  | NAGEMENT DISTRICT |  |
| Ellen Garvey, Air Pollu | tion Control Officer   | Date              |  |

## TABLE OF CONTENTS

| 1.    | STANDARD CONDITIONS   | 1  |
|-------|---|----|
| II.   | EQUIPMENT LIST  | 5  |
|       | A. Permitted Source List  | 5  |
|       | B. Abatement Device List  | 5  |
| III.  | GENERAL APPLICABLE REQUIREMENTS                                 | 6  |
| IV.   | SOURCE-SPECIIC APPLICABLE REQUIREMENTS                          | 9  |
| V.    | SCHEDULE OF COMPLIANCE  | 13 |
| VI.   | PERMIT CONDITIONS   | 13 |
|       | A. Source Specific Permit Conditions                            | 13 |
|       | B. Facility-wide Permit Conditions                              | 13 |
| VII.  | APPLICABLE EMISSION LIMITS & COMPLIANCE MONITORING REQUIREMENTS | 14 |
| VIII. | TEST METHODS  | 17 |
| IX.   | GLOSSARY  | 18 |
| X.    | APPENDIX A - STATE IMPLEMENTATION PLAN                          | 20 |

Proposed Permit for Site #: 733

Expiration Date: xx-xx-01

ID: AC

#### I. STANDARD CONDITIONS

#### A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations:

BAAQMD Regulation 1 - General Provisions and Definitions

(as amended by the District Board on 11/3/93);

SIP Regulation 1 - General Provisions and Definitions

(as approved by EPA through 11/10/82);

BAAQMD Regulation 2, Rule 1 - Permits, General Requirements

(as amended by the District Board on 6/7/95);

SIP Regulation 2, Rule 1 - Permits, General Requirements

(as approved by EPA through 6/23/95);

BAAQMD Regulation 2, Rule 2 - Permits, New Source Review

(as amended by the District Board on 6/7/95);

SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration

(as approved by EPA through 10/19/84); and

BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking

(as amended by the District Board on 6/15/94).

#### B. Conditions to Implement Regulation 2, Rule 6, Major Facility Review

- 1. This Major Facility Review Permit expires on [ENTER DATE 5 YEARS AFTER ISSUANCE]. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than [6 MONTHS PRIOR TO EXPIRATION] and no earlier than [ONE YEAR PRIOR TO EXPIRATION]. If a complete application for renewal has not been submitted in accordance with these deadlines, the facility may not operate after [DAY PRIOR TO EXPIRATION]. (Regulation 2-6-307, 404.2, & 409.6; MOP Volume II, Part 3, §4.2)
- 2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307 409.7; MOP Volume II, Part 3, §4.11)
- 3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)
- 4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)
- <u>5.</u> The filing of a request by the facility for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-

#### I. Standard Conditions (continued)

409.7; MOP Volume II, Part 3, §4.11)

- <u>6.</u> This permit does not convey any property rights of any sort, nor any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit within 30 days. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
- 8. Any records required to be maintained pursuant to this permit which the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
- 9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B Public Information, Confidentiality of Business Information. (40 CFR Part 2)
- 10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)

#### **Minor Permit Modification Procedures**

Notwithstanding the provisions set forth in Regulation 2, Rule 6, Major Facility Review, Section 411, Reports to EPA and Public Petitions for Major Facility Review Permits; Section 412, Public Participation, Major Facility Review Permit Issuance; and Section 414, Minor Permit Modification Procedures:

- 1. Advance public notice and EPA review shall not be required for any proposed minor permit modification. Once per calendar quarter, the District shall publish a list that includes any minor permit modification issued during the previous quarter.
- 2. For any minor permit modification involving an emission increase from any source or group of sources equal to or greater than: 5 tons per year of a regulated air pollutant; 2 tons per year of any single hazardous air pollutant; and 5 tons per year of any combination of hazardous air pollutants, the District shall provide to EPA a copy of each relevant application or a summary of the application, and a copy of each final permit revision.

Expiration Date: xx-xx-01

ID: AC

#### I. Standard Conditions (continued)

3. For any minor permit modification involving an emission increase from any source or group of sources of less than: 5 tons per year of a regulated air pollutant, 2 tons per year of any single hazardous air pollutant; and 5 tons per year of any combination of hazardous air pollutants, the District shall not submit a copy of the relevant application, a summary of the application, or final permit revision to EPA. EPA shall not object to any permit modification involving an emission increase below the levels described herein. Such permit modifications shall be incorporated as attachments to this permit during the remaining term of the permit, and incorporated into the body of the permit as part of the five year permit renewal.

#### **C.** Requirement to Pay Fees

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

#### **D.** Inspection and Entry

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment which is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

#### E. Records

Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of entry. (Regulation 2-6-501, Regulation 3; MOP Volume II, Part 3, §4.7)

#### **F.** Monitoring Reports

All required monitoring reports must be submitted to the District at least once every six months. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-complicance with the permit shall be reported to the District's Compliance and Enforcement Division within 10 days of the discovery of the incident. Within 30 days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. (Regulation 2-6-502, Regulation 3; MOP Volume II, Part 3, §4.7)

#### **G.** Compliance Certification

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division, and a copy of the certification should be sent to the Environmental Protection Agency at the following address:

Expiration Date: xx-xx-01

ID: AC

#### I. Standard Conditions (continued)

Director of the Air Division
USEPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105
Attention: Air-3

(MOP Volume II, Part 3, §4.5 and 4.15)

#### **H.** Emergency Provisions

- 1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)
- The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit caused by conditions beyond the permit holder's reasonable control by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. Any variance granted by the Hearing Board from any term or condition of this permit which lasts longer than 90 days will be subject to EPA approval. (MOP Volume II, Part 3, §4.8)
- 3. Notwithstanding the foregoing, the granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement unless the Major Facility Review Permit has been modified pursuant to Regulation 2, Rule 6. (MOP Volume II, Part 3, §4.8)

#### I. Severability

In the event that any provision of this permit is invalidated by a court or tribunal of competent jurisdiction, or by the Administrator of the EPA, all remaining portions of the permit shall remain in full force and effect. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

#### J. Accidental Release

This facility is subject to 40 CFR Part 68, Chemical Accident Prevention Provisions. The permit holder shall submit a risk management plan (RMP) by the date specified in §68.10. The permit holder shall also certify compliance with the requirements of Part 68 as part of the annual compliance certification, as required by Regulation 2, Rule 6. (40 CFR Part 68, Regulation 2, Rule 6)

## II. EQUIPMENT LIST

## A. Permitted Source List

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2-1-302.

**Table II-A** 

| S-#   | Description                     | Make or Type       | Model   | Capacity              |
|-------|---------------------------------|--------------------|---------|-----------------------|
| S-12  | Waste Gas Burner, Pedestal      | Pacific Flush Tank | 4D-1348 | 5.8 MM Btu/hr         |
|       | Туре                            |                    |         |                       |
| S-13  | Digester Waste Gas Flare        | John Zink          | EEF-V-3 | 7.5 MMBtu/hr          |
| S-14  | Engine Generator (landfill gas, | Waukesha           | 5200GL  | 8.2 MMBtu/hr, 1150 hp |
|       | digester gas, natural gas)      |                    |         |                       |
|       | (Existing after 6/15/97)        |                    |         |                       |
| S-15  | Engine Generator (landfill gas, | Waukesha           | 5200GL  | 8.2 MMBtu/hr, 1150 hp |
|       | digester gas, natural gas)      |                    |         |                       |
|       | (Existing after 6/15/97)        |                    |         |                       |
| S-100 | Municipal Wastewater            | custom             |         |                       |
|       | Treatment Plant                 |                    |         |                       |
| S-110 | Preliminary Treatment           | custom             |         | 19.5 MM gal/day       |
| S-120 | Primary Treatment               | custom             |         | 19.5 MM gal/day       |
| S-130 | Secondary Treatment             | custom             |         | 19.5 MM gal/day       |
| S-140 | Tertiary Treatment              | custom             |         | 19.5 MM gal/day       |
| S-150 | Disinfection                    | custom             |         | 19.5 MM gal/day       |
| S-161 | Solids Dewatering System        | custom             |         | 19.5 MM gal/day       |
| S-170 | Anaerobic Digestors             | custom             |         | 19.5 MM gal/day       |

## **B.** Abatement Device List

None

### III. GENERAL APPLICABLE REQUIREMENTS

The permit holder shall comply with <u>all</u> applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations <u>and other federal requirements</u> cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements would not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in <u>Part Section IV</u>, <u>Source-Specific</u> Applicable Requirements, <u>and Part VI</u>, <u>Applicable Emission Limits & Compliance Monitoring Requirements</u>, of this permit.

The dates in parenthesis in the Title column <u>identify the versions of the regulations being cited</u> <u>and are, as applicable:</u>

- 1. BAAOMD regulation(s):
- ‡ The date(s) of adoption or most recent amendment of the regulation by the District Board or, for SIP requirements
- 2. Any federal requirement, including a version of a District regulation that has been approved into the SIP:
  - ‡ The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

Where an applicable requirement is a SIP requirement, the full language of the SIP requirement is included in Appendix A of this permit.

**Table III** 

| A Paski                | Donald or Tide                                | SIP-approved/ |  |
|------------------------|---|---------------|--|
| Applicable             | Regulation Title or                           | FE (V/N)      |  |
| Requirement            | Description of Requirement                    | (Y/N)         |  |
| BAAQMD<br>Regulation 1 | General Provisions and Definitions (11/3/93)  | N             |  |
| SIP                    | General Provisions and Definitions (11/10/82) | <u>Y</u>      |  |
| Regulation 1           |   |               |  |
| BAAQMD                 | Air Pollution Episode Plan (3/20/91)          | N             |  |
| Regulation 4           |   |               |  |
| SIP                    | Air Pollution Episode Plan (8/06/90)          | <u>Y</u>      |  |
| Regulation 4           |   |               |  |
| BAAQMD                 | Open Burning (11/2/94)                        | N             |  |
| Regulation 5           |   |               |  |

## III. General Applicable Requirements (continued)

Table III (continued)

|                         |   | SIP-approved/ |  |
|-------------------------|---|---------------|--|
| Applicable              | Regulation Title or                               | FE            |  |
| Requirement             | Description of Requirement                        | (Y/N)         |  |
| SIP                     | Open Burning (5/3/84)                             | <u>Y</u>      |  |
| Regulation 5            |   |               |  |
| BAAQMD                  | Particulate Matter and Visible Emissions          | N             |  |
| Regulation 6            | (12/19/90)  |               |  |
| SIP                     | Particulate Matter and Visible Emissions (5/3/84) | <u>Y</u>      |  |
| Regulation 6            |   |               |  |
|                         |   |               |  |
|                         |   |               |  |
|                         |   |               |  |
|                         |   |               |  |
|                         |   |               |  |
| BAAQMD                  | Odorous Substances (3/17/82)                      | N             |  |
| Regulation 7            |   |               |  |
|                         |   |               |  |
| BAAQMD                  | Organic Compounds - General Provisions            | Y             |  |
| Regulation 8,           | (6/15/94)   |               |  |
| Rule 1                  | Organic Compounds - Architectural Coatings        | NI            |  |
| BAAQMD<br>Regulation 8, | (12/20/95)  | N             |  |
| Rule 3                  | (12/20/73)  |               |  |
| SIP                     | Organic Compounds - Architectural Coatings        | <u>Y</u>      |  |
| Regulation 8,           | (11/16/83)  |               |  |
| Rule 3                  |   |               |  |
| BAAQMD                  | Organic Compounds-General Solvent and Surface     | Y             |  |
| Regulation 8,           | Coating Operations (12/20/95)                     |               |  |
| Rule 4                  |   |               |  |
| BAAQMD                  | Organic Compounds-Solvent Cleaning Operation      | Y             |  |
| Regulation 8,           | (12/20/95)  |               |  |
| Rule 16                 |   |               |  |
| BAAQMD                  | Organic Compounds - Aerosol Paint Products        | N             |  |
| Regulation 8,           | (12/20/95)  | 14            |  |
| Rule 49                 | ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )           |               |  |
| SIP                     | Organic Compounds - Aerosol Paint Products        | <u>Y</u>      |  |
| Regulation 8,           | (3/22/95)   |               |  |
| <u>Rule 49</u>          |   |               |  |

Expiration Date: xx-xx-01

ID: AC

## III. General Applicable Requirements (continued)

## Table III (continued)

|                                    |   | SIP-approved/ |  |
|------------------------------------|---|---------------|--|
| Applicable                         | Regulation Title or   | FE            |  |
| Requirement                        | Description of Requirement  | (Y/N)         |  |
| BAAQMD<br>Regulation 8,<br>Rule 51 | Organic Compounds - Adhesive and Sealant<br>Products (12/20/95)                       | N             |  |
| BAAQMD<br>Regulation 9,<br>Rule 1  | Inorganic Gaseous Pollutants-Sulfur Dioxide (3/15/95)                                 | N             |  |
| SIP Regulation                     | Inorganic Gaseous Pollutants - Sulfur Dioxide   | Y             |  |
| 9, Rule 1                          | (5/3/84)  |               |  |
| BAAQMD<br>Regulation 9,<br>Rule 2  | Inorganic Gaseous Pollutants-Hydrogen Sulfide (3/17/82)                               | N             |  |
| BAAQMD<br>Regulation 11,<br>Rule 2 | Hazardous Pollutants - Asbestos Demolition,<br>Renovation and Manufacturing (12/4/91) | Y             |  |
| BAAQMD<br>Regulation 12,<br>Rule 4 | Miscellaneous Standards of Performance -<br>Sandblasting (7/11/90)                    | N             |  |
| SIP<br>Regulation 12,<br>Rule 4    | Miscellaneous Standards of Performance -<br>Sandblasting (9/2/81)                     | <u>Y</u>      |  |

## IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with <u>all</u> applicable requirements, <u>including those</u> specified in the BAAQMD and SIP Rules and Regulations <u>and other federal requirements</u> cited below. <u>The requirements cited in the following tables apply in a specific manner to the indicated source(s).</u> The text of all permit conditions cited is included in Part V, Permit Conditions, of this permit. All other text may be found in the regulations themselves.

The dates in parenthesis in the Title column <u>identify</u> the versions of the <u>regulations</u> being cited <u>and</u> are, as <u>applicable</u>:

- 1. BAAQMD regulation(s):
- † The date(s) of adoption or most recent amendment of the regulation by the District Board or, for SIP requirements
- 2. Any federal requirement, including a version of a District regulation that has been approved into the SIP:
  - ‡ The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. Additionally, where an applicable requirement is a SIP requirement, the full language of the SIP requirement is included in Appendix A of this permit. All other text may be found in the regulations themselves.

## Table IV-A S-12 Waste Gas Burner S-13 Digester Waste Gas Flare

| Amultaabla   | December 1741 on                                    | F <u>ederally</u>   | Future    |
|--------------|---|---------------------|-----------|
| Applicable   | Regulation Title or                                 | E <u>nforceable</u> | Effective |
| Requirement  | Description of Requirement                          | (Y/N)               | Date      |
| BAAQMD       | Particulate Matter and Visible Emissions (12/19/90) |                     |           |
| Regulation 6 |   |                     |           |
| 6-301        | Ringelmann Number 1 Limitation                      | N                   |           |
| 6-310        | Particulate Weight Limitation                       | Y                   |           |
| 6-401        | Appearance of Emissions                             | Y                   |           |
|              |   |                     |           |
| SIP          | PROVISIONS NO LONGER IN CURRENT RULE                |                     |           |
| Regulation 6 | Particulate Matter and Visible Emissions (6/16/83)  |                     |           |
| 6-301        | Ringelmann Number 1 Limitation (9/5/79)             | $Y^1$               |           |

This section of the SIP rule has been removed from or revised in the current BAAQMD rule. Nevertheless, the source must comply with this SIP requirement until US EPA has reviewed and approved the District's revision of the regulation.

iration Date: xx-xx-01 ID:AC

## IV. Source-Specific Applicable Requirements (continued)

## Table IV-A (continued) S-12 Waste Gas Burner S-13 Digester Waste Gas Flare

| Applicable<br>Requirement         | Regulation Title or  Description of Requirement   | F <u>ederally</u><br>E <u>nforceable</u><br>(Y/N) | Future<br>Effective<br>Date |
|-----------------------------------|---|---|-----------------------------|
| BAAQMD<br>Regulation 9,<br>Rule 1 | Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)                                     |   |                             |
| 9-1-301                           | Limitations on Ground Level Concentrations  | N   |                             |
| 9-1-302                           | General Emission Limitations  | Y   |                             |
| SIP<br>Regulation 9,<br>Rule 1    | PROVISIONS NO LONGER IN CURRENT RULE Inorganic Gaseous Pollutants - Sulfur Dioxide (5/3/84) |   |                             |
| 9-1-301                           | Limitations on Ground Level Concentrations  | $Y^1$   |                             |

## Table IV-B S-14 Engine Generator S-15 Engine Generator

|              |   | F <u>ederally</u> | Future    |
|--------------|---|-------------------|-----------|
| Applicable   | Regulation Title or                                 | Enforceable       | Effective |
| Requirement  | Description of Requirement                          | (Y/N)             | Date      |
| BAAQMD       | Particulate Matter and Visible Emissions (12/19/90) |                   |           |
| Regulation 6 |   |                   |           |
| 6-301        | Ringelmann Number 1 Limitation                      | N                 |           |
| 6-310        | Particulate Weight Limitation                       | Y                 |           |
| 6-401        | Appearance of Emissions                             | Y                 |           |
|              |   |                   |           |
| SIP          | PROVISIONS NO LONGER IN CURRENT RULE                |                   |           |
| Regulation 6 | Particulate Matter and Visible Emissions (6/16/83)  |                   |           |
| 6-301        | Ringelmann Number 1 Limitation (9/5/79)             | $Y^1$             |           |

This section of the SIP rule has been removed from or revised in the current BAAQMD rule. Nevertheless, the source must comply with this SIP requirement until US EPA has reviewed and approved the District's revision of the regulation.

## IV. Source-Specific Applicable Requirements (continued)

**Table IV-B** (continued) **S-14 Engine Generator S-15 Engine Generator** 

|               |  | F <u>ederally</u>   | Future    |
|---------------|--|---------------------|-----------|
| Applicable    | Regulation Title or  | E <u>nforceable</u> | Effective |
| Requirement   | Description of Requirement                                 | (Y/N)               | Date      |
| BAAQMD        |  |                     |           |
| Regulation 9, | Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)    |                     |           |
| Rule 1        |  |                     |           |
| 9-1-301       | Limitations on Ground Level Concentrations                 | N                   |           |
| 9-1-302       | General Emission Limitations                               | Y                   |           |
|               |  |                     |           |
| SIP           | PROVISIONS NO LONGER IN CURRENT RULE                       |                     |           |
| Regulation 9, | Inorganic Gaseous Pollutants - Sulfur Dioxide (5/3/84)     |                     |           |
| Rule 1        |  |                     |           |
| 9-1-301       | Limitations on Ground Level Concentrations                 | $\mathbf{Y}^{1}$    |           |
|               |  |                     |           |
| BAAQMD        | NOx and CO requirements for Stationary Internal Combustion | N                   |           |
| Regulation 9  | Engines (1/20/93)  |                     |           |
| Rule 8        |  |                     |           |
| 9-8-301       | Emission Limits - Fossil Derived Fuel Gas                  | N                   |           |
| 9-8-301.2     | NOx Emission Limit for Lean Burn Engines                   | N                   |           |
| 9-8-301.3     | CO Emission Limit for Lean Burn Engines                    | N                   |           |
| 9-8-302       | Emission Limits - Waste Derived Fuel Gas                   | N                   |           |
| 9-8-302.1     | NOx Emission Limit for Lean Burn Engines                   | N                   |           |
| 9-8-302.3     | CO Emission Limit for Lean Burn Engines                    | N                   |           |
|               |  |                     |           |
| BAAQMD        |  |                     |           |
| Cond #10844   |  |                     |           |
| Part 1        | Emission Limits (basis: BACT, Offsets)                     | Y                   | 6/15/97   |
| Part 2        | Limit on exempt engines (basis: Offsets)                   | Y                   | 6/15/97   |
| Part 3        | Records basis: Offsets)                                    | Y                   | 6/15/97   |
| Part 4        | Periodic monitoring (basis: Regulation 2-6-409.2)          | Y                   | 6/15/97   |

This section of the SIP rule has been removed from or revised in the current BAAQMD rule. Nevertheless, the source must comply with this SIP requirement until US EPA has reviewed and approved the District's revision of the regulation.

Expiration Date: xx-xx-01 ID:AC

## IV. Source-Specific Applicable Requirements (continued)

Table IV-C
S-110 Preliminary Treatment
S-120 Primary Treatment
S-130 Secondary Treatment
S-140 Tertiary Treatment
S-150 Disinfection
S-161 Solids Dewatering System
S-170 Anaerobic Digestors

|               |  | F <u>ederally</u> | Future    |
|---------------|--|-------------------|-----------|
| Applicable    | Regulation Title or                          | Enforceable       | Effective |
| Requirement   | Description of Requirement                   | (Y/N)             | Date      |
| BAAQMD        | Organic Compounds-Miscellaneous Operation    |                   |           |
| Regulation 8, |  |                   |           |
| Rule 2        |  |                   |           |
| 8-2-301       | Miscellaneous Operations Standards (3/21/96) | Y                 |           |

This section of the SIP rule has been removed from or revised in the current BAAQMD rule. Nevertheless, the source must comply with this SIP requirement until US EPA has reviewed and approved the District's revision of the regulation.

#### V. SCHEDULE OF COMPLIANCE

The permit holder shall continue to comply with all applicable requirements cited in Parts III and IV of this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit.

#### VI. PERMIT CONDITIONS

### A. Source Specific Permit Conditions

#### Condition \*10844

For Sources S-14 and S-15, Engine Generators Effective 6/15/97

- 1. The emission factors of the Engine/Generator No. 4 (S-14) and Engine/Generator No. 5 (S-15) shall not exceed:
  - a. 0.3 gram/bhp.hr for POC,
  - b. 2.5 gram/bhp.hr for CO; and 1.5 gram/bhp.hr for NOx.(basis: BACT, Offsets)
- 2. The combined electricity generated by the Reciprocating Engines (S-8, S-9 and S-10) shall not exceed 258,000 kW.hr during any rolling 12 consecutive month period after S-14 and S-15 are in operation. (basis: Offsets)
- 3. To demonstrate compliance with Condition #2, the monthly combined electricity generated by S-8, S-9 and S-10 shall be maintained in a District approved log. These records shall be kept on site and made available for District inspection for a period of at least 24 months from the date on which a record is made. (basis: Offsets)
- 4. The owner/operator shall ensure that an annual performance test is conducted in accordance with the District test procedures to demonstrate compliance with the NOx and CO limits. The owner/operator may submit an alternative monitoring plan to the District for approval. If the alternative monitoring plan is approved, the plan shall supercede the annual source test requirement. Approvals shall be processed using the permit modification procedure contained in Regulation 2, Rule 6. (Basis: Regulation 2-6-409.2)

## **B.** Facility-wide Permit Conditions

None

## VII. APPLICABLE EMISSION LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included only to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any indicate the type of compliance monitoring required for each applicable emission limit. The monitoring frequency indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown, either annual (A), quarterly (Q), monthly (M), daily (D), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

Table VII-A S-12 Waste Gas Burner S-13 Digester Waste Gas Flare

| Pollutant | Emission Limit Citation | FE<br>Y/N | Future<br>Effective<br>Date | Emission Limit  | Monitoring<br>Requirement<br>Citation | Monitoring<br>Frequency<br>(P/C/N) | Monitoring<br>Type |
|-----------|-------------------------|-----------|-----------------------------|---|---------------------------------------|------------------------------------|--------------------|
| TSP       | BAAQMD<br>6-301         | N         |                             | Ringelmann No. 1  |                                       | N                                  |                    |
|           | BAAQMD<br>6-310         | Y         |                             | 0.15 grain/dscf<br>@ 6% O2  |                                       | N                                  |                    |
|           | SIP 6-301               | Y         |                             | Ringelmann No. 1  |                                       | N                                  |                    |
| SO2       | 9-1-301                 | N         |                             | GLC <sup>1</sup> of 0.5 ppm for 3<br>min or 0.25 ppm for<br>60 min or 0.05 ppm<br>for 24 hours  |                                       | N                                  |                    |
|           | BAAQMD<br>9-1-302       | Y         |                             | 300 ppm (dry)   |                                       | N                                  |                    |
|           | SIP<br>9-1-301          | Y         |                             | Federal std: GLC <sup>1</sup> of<br>140 ppb, 24-hr<br>average, once/yr and<br>30 ppb, annual<br>average<br>State std: GLC <sup>1</sup> of 40<br>ppb, 24-hr average,<br>and 250 ppb, 1 hr<br>average |                                       | N                                  |                    |

<sup>&</sup>lt;sup>1</sup> Ground Level Concentration

## VII. Applicable Eimission Limits & Compliance Monitoring Requirements (continued)

Table VII-B S-14 Engine Generator S-15 Engine Generator

|           | Emission  |     | Future    |                                      | Monitoring   | Monitoring |                |
|-----------|-----------|-----|-----------|--------------------------------------|--------------|------------|----------------|
|           | Limit     | FE  | Effective |                                      | Requirement  | Frequency  | Monitoring     |
| Pollutant | Citation  | Y/N | Date      | Emission Limit                       | Citation     | (P/C/N)    | Type           |
| TSP       | BAAQMD    | N   |           | Ringelmann No. 1                     |              | N          |                |
|           | 6-301     |     |           |                                      |              |            |                |
|           | BAAQMD    | Y   |           | 0.15 grain/dscf                      |              | N          |                |
|           | 6-310     |     |           | @ 6% O2                              |              |            |                |
|           | SIP 6-301 | Y   |           | Ringelmann No. 1                     |              | N          |                |
| SO2       | BAAQMD    | N   |           | GLC <sup>1</sup> of 0.5 ppm for 3    |              | N          |                |
|           | 9-1-301   |     |           | min or 0.25 ppm for 60               |              |            |                |
|           |           |     |           | min or 0.05 ppm for 24               |              |            |                |
|           |           |     |           | hours                                |              |            |                |
|           | BAAQMD    | Y   |           | 300 ppm (dry)                        |              | N          |                |
|           | 9-1-302   |     |           |                                      |              |            |                |
|           | SIP       | Y   |           | Federal std: GLC <sup>1</sup> of 140 |              | N          |                |
|           | 9-1-301   |     |           | ppb, 24-hr average,                  |              |            |                |
|           |           |     |           | once/yr and 30 ppb,                  |              |            |                |
|           |           |     |           | annual average                       |              |            |                |
|           |           |     |           | State std: GLC <sup>1</sup> of 40    |              |            |                |
|           |           |     |           | ppb, 24-hr average, and              |              |            |                |
|           |           |     |           | 250 ppb, 1 hr average                |              |            |                |
| NOX       | BAAQMD    | N   |           | 140 ppmv @ 15% O2,                   |              | P/A        |                |
|           | 9-8-301.2 |     |           | dry                                  |              |            |                |
|           | BAAQMD    | N   |           | 140 ppmv @ 15% O2,                   |              | P/A        |                |
|           | 9-8-302.1 |     |           | dry                                  |              |            |                |
|           | BAAQMD    | Y   | 6/15/97   | 1.5 gram/bhp-hr                      | BAAQMD       | P/A        | Source test or |
|           | cond      |     |           |                                      | cond #10844, |            | alternate      |
|           | #10844,   |     |           |                                      | part 4       |            | monitoring     |
|           | part 1    |     |           |                                      |              |            | plan           |
|           |           |     |           |                                      |              |            |                |
| CO        | BAAQMD    | N   |           | 2000 ppmv @ 15% O2,                  |              | P/A        |                |
|           | 9-8-301.3 |     |           | dry                                  |              |            |                |

<sup>&</sup>lt;sup>1</sup> Ground Level Concentration

ration Date: xx-xx-01 ID:AC

## VII. Applicable Eimission Limits & Compliance Monitoring Requirements (continued)

**Table VII-B** (continued) **S-14 Engine Generator S-15 Engine Generator** 

|           | Emission<br>Limit | FE  | Future<br>Effective |                       | Monitoring<br>Requirement | Monitoring<br>Frequency | Monitoring     |
|-----------|-------------------|-----|---------------------|-----------------------|---------------------------|-------------------------|----------------|
| Pollutant | Citation          | Y/N | Date                | <b>Emission Limit</b> | Citation                  | (P/C/N)                 | Type           |
|           | BAAQMD            | N   |                     | 2000 ppmv @ 15% O2,   |                           | N                       |                |
|           | 9-8-302.3         |     |                     | dry                   |                           |                         |                |
|           | BAAQMD            | Y   | 6/15/97             | 2.5 gram/bhp-hr       | BAAQMD                    | N                       | Source test or |
|           | cond              |     |                     |                       | cond #10844,              |                         | alternate      |
|           | #10844,           |     |                     |                       | part 4                    |                         | monitoring     |
|           | part 1            |     |                     |                       |                           |                         | plan           |
|           |                   |     |                     |                       |                           |                         |                |
| POC       | BAAQMD            | Y   | 6/15/97             | 0.3 gram/bhp-hr       |                           | N                       |                |
|           | cond              |     |                     |                       |                           |                         |                |
|           | #10844,           |     |                     |                       |                           |                         |                |
|           | part 1            |     |                     |                       |                           |                         |                |

#### **Table VII-C**

S-110 Preliminary Treatment S-120 Primary Treatment S-130 Secondary Treatment S-140 Tertiary Treatment S-150 Disinfection S-161 Solids Dewatering System

S-170 Anaerobic Digestors

|           | Emission |     | Future    |                       | Monitoring  | Monitoring |            |
|-----------|----------|-----|-----------|-----------------------|-------------|------------|------------|
|           | Limit    | FE  | Effective |                       | Requirement | Frequency  | Monitoring |
| Pollutant | Citation | Y/N | Date      | <b>Emission Limit</b> | Citation    | (P/C/N)    | Type       |
| VOC       | BAAQMD   | Y   |           | 15 lb/day & 300 ppm   | N           | N          | N          |
|           | 8-2-301  |     |           | total carbon on dry   |             |            |            |
|           |          |     |           | basis                 |             |            |            |

### VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally found in Section 600 of the regulation. The following table indicates only the test methods associated with the emission limits referenced in Section VII - Applicable Emission Limits & Compliance Monitoring Requirements, of this permit.

**Table VIII** 

| Applicable      |   |   |
|-----------------|---|---|
| Requirement     | Description of Requirement                  | Acceptable Test Methods                                       |
| Requirement     | Description of Requirement                  | Acceptable Test Nicthous                                      |
| BAAQMD          | Ringelmann No. 1 Limitation                 | Manual of Procedures, Volume I, Evaluation of Visible         |
| 6-301           | Kingennami No. 1 Emitation                  | Emissions   |
|                 | Particulate Weight Limitation               |   |
| BAAQMD<br>6-310 | Particulate Weight Limitation               | Manual of Procedures, Volume IV, ST-15, Particulates Sampling |
|                 | Limit on Odonous Community                  | 1 0   |
| BAAQMD          | Limit on Odorous Compounds                  | Manual of Procedures, Volume IV, ST-1, ST-8,                  |
| 7-303           | M: 11 O .:                                  | ST-11, ST-16, ST-22, Sampling of Odorous Compounds            |
| BAAQMD          | Miscellaneous Operations                    | Manual of Procedures, Volume IV, ST-7, Non-Methane            |
| 8-2-301         |   | Organic Carbon Sampling or EPA Method 25 or 25A.              |
| BAAQMD          | General Emission Limitation                 | Manual of Procedures, Volume IV, ST-19A, Sulfur               |
| 9-1-302         |   | Dioxide, Continuous Sampling, or ST-19B, Total Sulfur         |
| D + + 03 / ID   | 5 15 · g· · · · · · · · · · · · · · · · · · | Oxides Integrated Sample                                      |
| BAAQMD          | Fuel Burning (Liquid and Solid              | Manual of Procedures, Volume III, Method 10,                  |
| 9-1-304         | Fuels)                                      | Determination of Sulfur in Fuel Oils.                         |
| BAAQMD          | NOX Limit                                   | Manual of Procedures, Volume IV, ST-13A, Oxides of            |
| 9-8-301.2       |   | Nitrogen, Continuous Sampling Limit on Odorous                |
|                 |   | Compounds and ST-14, Oxygen, Continuous Sampling              |
| BAAQMD          | CO Limit                                    | Manual of Procedures, Volume IV, ST-6, Carbon                 |
| 9-8-301.3       |   | Monoxide, Continuous Sampling and ST-14, Oxygen,              |
|                 |   | Continuous Sampling   |
| BAAQMD          | NOX Limit                                   | Manual of Procedures, Volume IV, ST-13A, Oxides of            |
| 9-8-302.1       |   | Nitrogen, Continuous Sampling Limit on Odorous                |
|                 |   | Compounds and ST-14, Oxygen, Continuous Sampling              |
| BAAQMD          | CO Limit                                    | Manual of Procedures, Volume IV, ST-6, Carbon                 |
| 9-8-302.30      |   | Monoxide, Continuous Sampling and ST-14, Oxygen,              |
|                 |   | Continuous Sampling   |
| BAAQMD          | NOX Limit                                   | Manual of Procedures, Volume IV, ST-13A, Oxides of            |
| Condition       |   | Nitrogen, Continuous Sampling Limit on Odorous                |
| #11084, Part 1  |   | Compounds and ST-14, Oxygen, Continuous Sampling              |
| BAAQMD          | CO Limit                                    | Manual of Procedures, Volume IV, ST-6, Carbon                 |
| Condition       |   | Monoxide, Continuous Sampling and ST-14, Oxygen,              |
| #11084, Part 1  |   | Continuous Sampling   |
| BAAQMD          | POC Limit                                   | Manual of Procedures, Volume IV, ST-7, Non-Methane            |
| Condition       |   | Organic Carbon Sampling or EPA Method 25 or 25A.              |
| #11084, Part 1  |   |   |

Proposed Permit for Facility #: A0733

Expiration Date: xx-xx-01

#### ID:AC

#### IX. GLOSSARY

#### **BAAQMD**

Bay Area Air Quality Management District

#### **Basis**

The underlying authority which allows the District to impose requirements.

#### CO

Carbon Monoxide

#### **Cumulative Increase**

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Used to determine whether threshold-based requirements are triggered.

#### **District**

The Bay Area Air Quality Management District

#### **EPA**

The federal Environmental Protection Agency.

#### **Excluded**

Not subject to any District Regulations.

#### Federally Enforceable, FE

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60, (NSPS), Part 61, (NESHAPs), Part 63 (HAP), and Part 72 (Permits Regulation, Acid Rain), and also including limitations contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

#### **Major Facility**

A facility with potential emissions of regulated air pollutants greater than 100 tons per year, greater than 10 tons per year of any single hazardous air pollutant, and/or greater than 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity as determined by the EPA administrator.

#### MFR

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Act and implemented by District Regulation 2, Rule 6.

#### **MOP**

Expiration Date: xx-xx-01

ID:AC

## **VIII IX. Glossary** (continued)

The District's Manual of Procedures.

#### **NMHC**

Non-methane Hydrocarbons

#### **NOx**

Oxides of nitrogen.

#### **NSR**

New Source Review. A federal program for preconstruction review and permitting of new and modified sources of air pollutants for which the District is classified "non-attainment". Mandated by Title I of the Clean Air Act and implemented by 40 CFR Parts 51 and 52 as well as District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

#### **POC**

**Precursor Organic Compounds** 

#### SIP

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

#### SO<sub>2</sub>

Sulfur dioxide

#### Title V

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

#### **VOC**

Volatile Organic Compounds

#### **Units of Measure:**

lb = pound

ppm = parts per million

Plant Name: City of Sunnyvale Water Pollution Control

Proposed Permit for Site #: A0733

Expiration Date: xx-xx-01

ID: AC

## X. APPENDIX A - STATE IMPLEMENTATION PLAN

See Attachment